

From Yoga to Bruce Lee



*"Water can flow,
or it can crash.
Be like water,
my friend."
-Bruce Lee*

A method for integrated breathing, relaxed posture, and rehabilitation in strings

By Joe Molinaro

What I Will Share With You

- A 60 minute presentation
- Not a SYSTEM for playing or teaching strings, but a METHOD for encouraging breathing and relaxation for students who already should have fundamentals.
- A method that works in compliment with many different styles of pedagogy.
- A method designed for group or private instruction.
- A way to save rehearsal time and resolve many issues that rehearsal or instruction do not.
- Some traditional yoga routines
- Some string pedagogy research
- Some testimony of using the above in the classroom.

Agenda

- 1. Brief introduction
- 2. Yoga demonstration (participation!)
- 3. Tai Chi/ String Pedagogy research
- 4. "Bruce Lees," the resulting method (parti!)
- 5. Practical application, testimony, sources
- 6. Conversations about the presentation

Joe Molinaro: author, presenter

- Pittsburgh native
- Graduate of IU Jacobs School of Music
- Member of American String Teachers Association
- Orchestra director at Franklin Township Middle School, 2009-2011
- Composer, jazz/ rock/ classical performer and arranger
- joseph.molinaro@ftcsc.k12.in.us
- joeymolinaro@gmail.com

Joe Molinaro: author, presenter

- I was poorly guided as a young player.
- I had to develop my own techniques for relaxing.
- In my six-year career as a private and orchestra teacher I found myself inheriting students with unique technical shortcomings.

My experience with yoga

- I first was exposed to yoga while playing with the Pittsburgh Youth Symphony Orchestra in high school.
- We started every Sunday morning with a brief yoga routine.
- When we traveled to the National Youth Symphony Orchestra festival in Sarasota, FL, there was a daily yoga session.
- When we performed Beethoven's Symphony #2, we paused for a yoga break before the final movement.
- From then on I have been to some yoga classes with various teachers.

Classroom-grade yoga

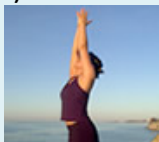
- taken from:
- <http://www.yogabasics.com/yoga-posture-sequences/sun-salutations/>
- Sunrise Salutation: parallel to “Sun Worshipper,” another name for “Statue of Liberty” taught by Suzuki.
- THE MAIN DIFFERENCE BETWEEN YOGA AND “STRETCHING” IS THAT YOGA COMBINES EACH MOVEMENT WITH A BREATH.

Yoga: (half) Sunrise Salutation



- **1.** Start in Mountain with the palms together
- A. Have the feet together or 2-3 inches apart, parallel, facing forward.
- B. Palms are lightly pressed together with the shoulders down and back and the chest pressing in towards the thumbs.
- C. Crown of the head lifts up, chin is parallel to the floor.

Yoga: (half) Sunrise Salutation



- **2. Inhale** and sweep the arms up with palms together
- A. Stay in Mountain alignment.
- B. Look up at the thumbs.
- C. Lift out of the waist, reaching up towards the sky.

Yoga: (half) Sunrise Salutation



- **3. Exhale** into Forward Fold
- A. Press the palms flat to the floor, if necessary bend the knees slightly. If you are flexible enough, bring the fingertips in line with the toes.
- B. Press the forehead in towards the legs.

Yoga: (half) Sunrise Salutation



- **4. Inhale** and lift into Upward Forward Fold
- A. Lift half way up with the arms, legs and back straight.
- B. The fingertips are touching the floor or you can place the palms on the shins or knees.
- C. Lift the chest and look up as high as comfortable.

Yoga: (half) Sunrise Salutation



- **5. Exhale** into Forward Fold
- A. Press the palms flat to the floor, if necessary bend the knees slightly. If you are flexible enough, bring the fingertips in line with the toes.
- B. Press the forehead in towards the legs.

Yoga: (half) Sunrise Salutation



- **6. Inhale** and step right foot back into Warrior's pose.
- A. Make sure the left knee is directly over the ankle.
- B. Shoulders are down and back, chest presses forward, crown lifts up and the back leg is straight.

Yoga: (half) Sunrise Salutation



- **7. Exhale** into Forward Fold
- A. Press the palms flat to the floor, if necessary bend the knees slightly. If you are flexible enough, bring the fingertips in line with the toes.
- B. Press the forehead in towards the legs.

Yoga: (half) Sunrise Salutation



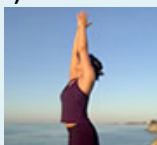
- **8. Inhale** and step left foot back into Warrior's pose.
- A. Make sure the left knee is directly over the ankle.
- B. Shoulders are down and back, chest presses forward, crown lifts up and the back leg is straight.

Yoga: (half) Sunrise Salutation



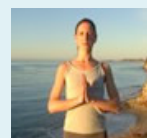
- **9. Exhale** into Forward Fold
- A. Press the palms flat to the floor, if necessary bend the knees slightly. If you are flexible enough, bring the fingertips in line with the toes.
- B. Press the forehead in towards the legs.

Yoga: (half) Sunrise Salutation



- **10. Inhale** and sweep the arms up with palms together
- A. Stay in Mountain alignment.
- B. Look up at the thumbs.
- C. Lift out of the waist, reaching up towards the sky.

Yoga: (half) Sunrise Salutation



- **11. Start** in Mountain with the palms together
- A. Have the feet together or 2-3 inches apart, parallel, facing forward.
- B. Palms are lightly pressed together with the shoulders down and back and the chest pressing in towards the thumbs.
- C. Crown of the head lifts up, chin is parallel to the floor.

Yoga: Sunrise Salute (more complete)

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Yoga: Sunrise Salute (more complete)



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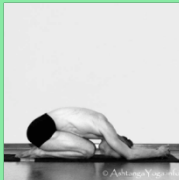
- **4. Inhale** and step right foot back into Warrior's pose.
- A. Make sure the left knee is directly over the ankle.
- B. Shoulders are down and back, chest presses forward, crown lifts up and the back leg is straight.

Yoga: Sunrise Salute (more complete)



- **5.** Step the left foot back into Plank
- A. The body is one straight line, in a push up position.
- B. Press the heels back, reach the crown of the head forward.

Yoga: Sunrise Salute (more complete)



- **6. Exhale** into Child's Pose
- A. Keep the back of the feet on the floor
- B. Forehead on the floor
- C. Arms can be in front or at sides.

Yoga: Sunrise Salute (more complete)



- **7. Inhale** into Cobra
- A. Scoop the chest forward, straighten the arms and stay on the tops of the feet.
- B. Reach the crown of the head up, press the chest forward, and lift the hips and legs off of the floor. Bend the elbows slightly if it feels like you are straining the low back.
- C. The tongue can press against the roof of the mouth or outside of the mouth.

Yoga: Sunrise Salute (more complete)



- **8. Exhale** into Downward-Facing Dog.
- A. Tuck the toes under, bend the elbows and lift the hips up and back.
- B. Press firmly into the hands and arms to press the hips back. Let the head hang from the neck. Press the heels into the floor. The legs are straight or can be slightly bent to flatten the back.

Yoga: Sunrise Salute (more complete)



- **9. Inhale** and step right foot forward into Warrior's pose.
- A. Step the right foot forward between the two hands. Adjust the leg so that the knee is directly over the ankle and the toes and knee are pointing forward.
- B. Keep the back leg straight as you sink the hips down and reach the front knee, chest and gaze forward.

Yoga: Sunrise Salute (more complete)



- **10. Exhale** into Forward Fold
- A. Press the palms flat to the floor, if necessary bend the knees slightly. If you are flexible enough, bring the fingertips in line with the toes.
- B. Press the forehead in towards the legs.

Yoga: Sunrise Salute (more complete)



- **11. Inhale** and sweep the arms up with palms together
- A. Stay in Mountain alignment.
- B. Look up at the thumbs.
- C. Lift out of the waist, reaching up towards the sky.

Yoga: Sunrise Salute (more complete)



- **12.** Start in Mountain with the palms together
- A. Have the feet together or 2-3 inches apart, parallel, facing forward.
- B. Palms are lightly pressed together with the shoulders down and back and the chest pressing in towards the thumbs.
- C. Crown of the head lifts up, chin is parallel to the floor.

Tension

- Without tension, muscles can't move!
- TETANY is the enemy.
- Demonstrate this to your students:
 - Show students two identical postures, one loose & one tense. ask which is better (they can't tell)
 - Then play selections with the two postures. They can tell immediately!
 - Finally challenge a student to snatch the instrument away from you. The sour, tense posture will not yield.

Possible reasons for tension:

- **CLASSROOM:** poor posture, uncomfortable in groups, out of practice, instrument size, new techniques/ notes, over/ under-engaged, seeking more focused or louder tone, fast or slow tempi, poor modeling of tone, musical illiteracy
- **HOME:** change of schools, yelling at home, parents out of work, peer pressure, uncomfortable with teacher, relationships, psychological issues, video games/ computer use, injury, TV viewing, poor nutrition, lack of exercise, abuse, emotional disorders, lack of sleep, bad grades, no consistency at home, low expectations for the future, practicing a less sensitive instrument, caffeine/ drug use, temperature of the room, spiritual deficiency, immersion in unorthodox musical tones, learning disability, disinterest
- **PERFORMANCE ANXIETY**

Remedial teaching research:

- Paul Rolland:
 - Use hands to detect and correct tension
 - "...the cure for excessive muscle tension in all parts of the body is the introduction of slight motions into the areas not directly involved in playing. Slight body movements, introduced by shifting weight, eliminate static tensions and allow the player to maintain natural body balance."
- Suzuki:
 - "Remedial teaching should always be present along with developmental work."
 - Ideation with the desired action (name it)

Remedial teaching:

- In other words:
- All students are remedial students!
- When students are tense, you need to add movement.
- Trading one pose for another isn't the answer.
- Insist on having the student demonstrate the ability to move all joints at all times.
- Words mean nothing in alleviating tension

Tai Chi Chuan, "supreme ultimate fist"

- Started in 16th century China
- Was popularized recently because of its low-impact style, but is an active and practical martial art from which Bruce Lee borrowed heavily in developing his own style.
- Like modern string pedagogy, Tai Chi revolutionized the "soft style."

The Body Mechanics of Tai Chi

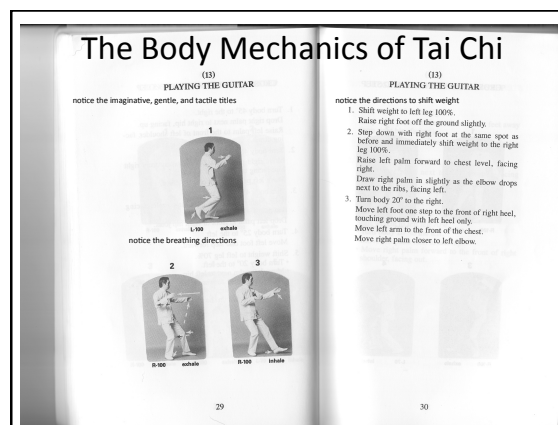
William C.C. Chen's 60 movements, a variation on Professor Cheng's 37 Postures.

Tai Chi shows that there must be a ratio of tension between opposing muscle groups.

Ideally students will begin with soft style 0:1 vs 1:0

Then students will progress toward 10:90 vs 90:10

Although it is not as desirable, students can begin from the hard style. 100:100 vs 100:100



When to breathe?

- We're told that breathing will happen naturally, but what if it doesn't?
- Breathing can sometimes interrupt movement
- "Breathe with the phrase,"– What does that mean?

When to breathe?

- Paul Rolland cites Szende-Nemessuri stating that 85.7% of inhalations occur during an up-bow.
- William C.C. Chen states
 - While inhalation is taking place, the diaphragm is contracted down to the lower abdomen, abdominal pressure is increased and the energy begins to flow moving outward and upward. During exhalation, the diaphragm is decreased and the flow of energy subsides. Now the arms are moving inward and downward.
- This is in line with the motions of the Sunrise Salute.
- Both styles agree that breathing must happen right before each bow change.

Breathing Exercise

- Half wiggle finger and hold their breath.
- Half wiggle finger and breathe deeply

A Conflict

- I developed this method based on my own experience. It is supported by William C.C. Chen and the ancient Kundalini yoga style, but contradicts Szende and Nemessuri.
- While Rolland claims that Szende and Nemessuri studied dozens of subjects, they only studied ten Hungarian ensemble violinists who generally exhaled on beat one (as if counting measures).
- Szende and Nemessuri's main warning is that 'backwards breathing' can stiffen the right shoulder
- The fact is IT DOESN'T REALLY MATTER; adding movement to the tetany is what is really important, and the motions can easily be flipped
- Either may be correct for different individuals:
 - Asthenic or pycnic physique
 - Proportion of limbs
 - Soloistic or orchestral tone
 - Balanced or unbalanced down and up-bows
 - Idiomatic demands of the piece

Assess breathing activity

- Anaerobic exercise hurts!
- We have roughly three muscle types:
 - White muscle (posture), anaerobic
 - Red muscle (sprinting), aerobic
 - Type IIx (magic), very aerobic

Good Breathing

- Intercostal muscles are like a belt around your abdomen going up to the bottom of the rib cage.
- The diaphragm is attached to the bottom of the lungs, but is an involuntary muscle that you can't move!
- The small of the back should also expand.
- The shoulders should not be raised!
- You should fill your lungs from bottom to top.
- Exhale from the bottom (like a tube of toothpaste)

Bruce Lees by Joey Molinaro

- these exercises work best for second or third year players, both to "soften" the posture and to develop a systematic approach to breathing and posture within the ensemble.
- these exercises emphasize parity or symmetry of the limbs
- They may be done diagnostically for specific problems or completely to prevent them.
- Only do one or two each day!
- Use exaggerated movements.
- Gain power through rational tension.
- Each game has breathing built in.
- Avoid overload!
- Each movement is based on pedagogical research.
- Ideation can be fun!

Basics of Breathing



Inhale

Intercostal muscles
expand, diaphragm drops,
back **expands**



Exhale

intercostal muscles
contract, diaphragm raises,
back **contracts**

Possible posture exercises:

Ask your choir or band director! Many of these exercises are a lot of fun. It is easy to count "inhale, 2, 3, 4, suspend, 2, 3, 4, out, 2, 3, 4, 5, 6, 7, 8..." but students can also do things like blow a constant stream of air into a pinwheel, attach an arrow to their breath, put their hands on their belly and back to feel the expansion, or use hands to show the flow of air from the belly to the chest.

How to administer warm-ups

- The following exercises should be presented
- first out of tempo by the director while the students imitate.
- Second in tempo with a metronome click
- Third with the instrument with first finger on a given string.
- Fourth on a scale, with at least two bows per note on a given string.
- Students may also practice these activities on an open string while you tune.

Feet/ knees



Inhale

Rock slightly onto toes,
knees straighten
-Smell the pie





Exhale

Rock onto heels,
knees bend
-aahhhh...



When your foot is planted (left foot slightly in front!) you should feel three main points of contact: the big toe, the inside "ball" of your foot, and the inside of the heel. William C. Chen calls these the "three nails." Or, students can pretend to be cartoon characters floating on a waft of freshly-baked pie.

Sway (short bows)

 <i>Inhale</i> Sway to the left -deflect punch to the right (with right hand)	 <i>Exhale</i> Sway to the right -deflect punch to the left (with right hand)
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Be a judo master blocking punches

Sway (long bows)

 <i>Inhale</i> Pop, then sway to the right -Dog goes for the food, leash pulls right.	 <i>Exhale</i> Pop, then sway to the left -Dog goes for the squirrel, leash pulls left.
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Set the scene: there is a restaurant on the left, a squirrel party on the right. You pull, but the dog wants to go to the left, then the dog follows. You pull, but the dog wants to chase the squirrels, then the dog follows.
Or sway like a tree in the breeze

Lower Back

 <i>Inhale</i> Lower back curls forward -Lion yawns	 <i>Exhale</i> Lower back straightens -Lion groans
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You can pretend that your body is a lion. Your rib cage is the upper-jaw, and your pelvis is the lower jaw. Do a great big lion yawn and groan!

Shoulders

 <i>Inhale</i> Shoulders pull behind -Breathe in to talk back	 <i>Exhale</i> Shoulders push in front -Shrink
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Pretend that a teacher is yelling at you for something you did. Take a breath and prepare to explain yourself, but before you speak your teacher criticizes you and your shoulders shrink back.

Head

 <i>Inhale</i> Head looks up -Inhale and watch balloon rise	 <i>Exhale</i> Head rocks down -“aw,” and watch balloon fall
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Imagine you are watching people try out flying machines. As they go up, you gasp. When they come back down, you say “aw.”

Forearm

 <i>Inhale</i> Pronate -look at your watch	 <i>Exhale</i> Supinate -say what time it is
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Inhale, look at your watch, and then say what time it is. The head moves the same as before.

Upper arms

 <i>Inhale</i>	 <i>Exhale</i>
Tricep, 80% tense; Bicep, 20% tense. -breathe	Bicep, 80% tense; Tricep, 20% tense. -play and pull the trombone slide in



"Tailgating" trombone with both hands

Wrist/ knuckles



 <i>Inhale</i>	 <i>Exhale</i>
Wrist bends in -Wings raise up	Wrist bends out -whoosh!

Imagine your wrist is a butterfly or bird flapping its wings. You can make a "whoosh" sound effect



Bow

 <i>Inhale</i>	 <i>Exhale</i>
Bow flattens -catch ant at tip	Bow tilts on far side from bridge -Release ant at frog and blow it away (or let it fall)

Jaw/ neck



 <i>Inhale</i>	 <i>Exhale</i>
Jaw opens -pick an apple (on your left) with your mouth	Jaw closes -spit it into the basket

torque

 <i>Inhale</i>	 <i>Exhale</i>
Pull string to the right (violin) Push string to the right (cello) -Pull the string back to shoot a deer	Push string to the right (violin) Pull string to the left (cello) -stop and say "aw," it's too cute



Imagine you are setting an arrow on a bow, getting ready to fire it to the left.

fingers

 <i>Inhale</i>	 <i>Exhale</i>
fingers straighten -strum guitar strings	fingers curl -sing



Sing a song (here we go, Steelers).

Thumb

 <i>Inhale</i>	 <i>Exhale</i>
Thumbs down -deal out a card	Thumbs up -count



Deal out cards, count each one.

Instrument

 <i>Inhale</i>	 <i>Exhale</i>
instrument pulls away -You and instrument inflate	instrument pushes in -you and your instrument deflate

Make your instrument breathe by making it appear to grow larger and smaller.

Point of Contact

 <i>Inhale</i>	 <i>Exhale</i>
Start in middle, bow drifts to left side of string -Breathe in, make a stitch to the right	Start in middle, bow drifts to right side of string -Make a cross-stitch, count it out loud.



Imagine you are sewing. Count each full stitch (back and forth)

Eyebrows



 <i>Inhale</i>	 <i>Exhale</i>
Eyebrows raise -Gasp!	Eyebrows fall -whew...

There will be no Christmas this year...
Our concert is not going to happen...
Did you study for our test?

Tongue

 <i>Inhale</i>	 <i>Exhale</i>
Tongue drops to floor of mouth -Breathe in (sot)	Tongue pushes to roof of mouth -Breathe out (nunn)

Chin

 <i>Inhale</i>	 <i>Exhale</i>
Rock towards corner of jaw -Crib rocks back, inhale	Rock towards chin -Cooo...

Imagine your head is a crib and baby coos. Rock on the chinrest.

Personal experience

- Less than 1% of my students are studying privately and our instructional time was recently cut by 50%, therefore my students need rehabilitation more than ever.
- I have been using bits and pieces of this for years, so students were not completely taken aback by the introduction of it into daily routine.
- Some students were skeptical, but daily laboratory models (grabbing violin, breathing), anecdotes (Bruce Lee vs. Chuck Norris), the relaxing effects, and ultimately the SOUND convinced them.

Personal experience

- It fits nicely into our routine: settling and silencing the class, tuning, scales.
- I am able to use imagery as a shorthand while conducting and rehearsing: "walk the dog here," "block the punches," "strum the guitar."
- We have explored some music of cultures related to these activities. In teaching a melodic minor scale, I took my orchestra outside where we studied melodic minor scales by improvising ragas.
- The plain directions can be used as an alternative to the image, but may not be as effective.

results

- Activities usually took about 2-5 minutes of class time.
- Students came to enjoy the activities, especially yoga
- Data collection (available soon)

Using Tai Chi in context

- You can use Sot and Nun (S and N, inhale and exhale) in music, especially in the following cases:
- Very slow music
- Asymmetrical rhythms and bow distributions
- Passages in which musicians tend to rush or become tense.
- rapid notes with accents.

Further Development

- String education most completely develops the eight multiple intelligences. This activity not only addresses the physical domain but the recently-added "naturalist" or "existential" domains.
- Study of the seven Chakras, whether taken as a symbol, center of gravity or center of consciousness, can be the key to physical, emotional, and spiritual well-being (and violin playing).
- You can explore the music of Carnatic/ Hindustani violinists, or various stringed instruments of Asia.
- Motion should always start slightly below the naval and be gradually faster toward the extremities. These exercises encourage this action.
- Understanding these motions helps directors, concertmasters, players, teachers and composers to place shifts and bowings.
- Beat stage fright by playing a scale with Bruce Lees

Partial Bibliography

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